

## Interview Summary

Application No.

10/715,192

Applicant(s)

HEINZ ET AL.

Examiner

Alicia M. Torres

Art Unit

3671

All participants (applicant, applicant's representative, PTO personnel):

(1) Alicia M. Torres.

(3) Steven Scott Lloyd.

(2) Thomas B. Will.

(4) Heinz Family.

Date of Interview: 12 October 2007.

Type: a) ☐ Telephonic b) ☐ Video Conference  
c) ☒ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☒ Yes e) ☐ No.

If Yes, brief description: Mr. Daniel John Heinz and Mr. Daniel Charles Hienz brought in a rough prototype of the lawnmower apparatus and grass guide. The motors rotated about a horizontal axis to give a general idea of how the invention is meant to work.

Claim(s) discussed: 18 and 20.

Identification of prior art discussed: Beranek et al.

Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☒ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: The applicant agreed to amend the claims in order to read more closely on the invention shown in the drawings and in order to read over Beranek et al. Proposed amendments of claims 18 and 20 were provided (see attached) which both Supervisor Will and Examiner Torres agreed read over the Beranek et al. reference. It should be noted that upon any received amendment, the examiner will conduct a further search.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

  
Examiner's signature, if required

PTOL-413A (07-07)

Approved for use through 09/30/2007. OMB 0851-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

**Applicant Initiated Interview Request Form**

Application No.: 10/715,192 First Named Applicant: Daniel Charles Heinz  
 Examiner: Alicia M. Torres Art Unit: 3671 Status of Application: PENDING

**Tentative Participants:**

(1) Steven Scott Lloyd (2) Daniel Charles Heinz  
 (3) Daniel John Heinz (4) \_\_\_\_\_

Proposed Date of Interview: Oct. 12, 2007 Proposed Time: 2:00 (AM/PM) (PM)

**Type of Interview Requested:**

(1) ☐ Telephonic (2) ☒ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☒ YES ☐ NO

If yes, provide brief description: PROTOTYPE

**Issues To Be Discussed**

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) <u>35 USC 103(a)</u>	<u>1, 4</u>	<u>US 2,478,558</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) <u>35 USC 112</u>	<u>1, 4</u>	<u>US 2,478,558</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(3) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(4) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Continuation Sheet Attached

**Brief Description of Arguments to be Presented:**

\* See attached pages  
The interview is not to present argument, but to show  
the prototype and discuss amendments to address rejections.

An interview was conducted on the above-identified application on \_\_\_\_\_.

**NOTE:** This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Applicant/Applicant's Representative Signature \_\_\_\_\_

Examiner/SPE Signature \_\_\_\_\_

Typed/Printed Name of Applicant or Representative \_\_\_\_\_

Registration Number, if applicable \_\_\_\_\_

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Dear Ms. Torres,

I thank you again for spending some time discussing application 10/715,192 with me on the phone, and also for agreeing to take the time to view my clients' prototype on October 12. We look forward to meeting you and Mr. Will.

I mentioned to you that I would send some preliminary papers that present the issues and proposed amendments that we can discuss at the interview, or by phone in the interim if you have some time. This fax highlights some proposed changes, and we would greatly appreciate any input you may have as to whether our changes are instructive.

1. We agreed during our prior discussion that the sources of rejection stem from our failure to describe Figure 1 with adequate distinction over Beranek (U.S. Pat. No. 2,478,558) in combination with the other prior art. We view Beranek as the key structural reference, and Claims 18 and 20 of the pending application as the claims that should distinguish the present invention from Beranek. We discussed focusing away from the relationship between the blade and grass guide, and more to the other structural components of the mower, particularly the sliding arch feature that is continuous with the grass guide and allows for the adjustment. We would like any feedback on the following amendments to Claims 18 and 20:

Claim 18 (currently amended): A rotary cutting apparatus comprising

an adjustable grass guide consisting essentially of a substantially rigid and rectangular member spanning the width of the apparatus transversely,

wherein the angle of said grass guide can be adjusted within an angular range of 1 to 90 degrees from vertical and temporarily fixed at any angle within said range,

a means for adjusting and temporarily fixing said angle within said range,

a plurality of drive shafts aligned above and parallel to said grass guide when said angle is fixed at 90 degrees from vertical,

said drive shafts extending rearward of the rear-most point of said grass guide when said angle is fixed at 90 degrees from vertical,

said drive shafts remaining parallel to said grass guide throughout its full range of angular adjustment,

a plurality of blades,

each a cutting blade centrally fixed to the rearward-extending end of each drive shaft in substantially perpendicular orientation to the shaft said drive shaft and said grass guide,  
wherein the lowest plane of rotation of each cutting blade extends below said grass guide when said angle is fixed at 90 degrees from vertical,

a power means driving the rotation of said drive shafts,

~~each shaft projecting downward from a power means at an angle tilted longitudinally between 51 and 90 degrees from vertical,~~

~~a grass guide,~~

~~a chassis, and~~

~~a means for effecting movement of the apparatus over a cutting surface,~~

~~said grass guide being a straight, rigid structure mounted substantially parallel to said drive shafts,~~

~~the bottom most portion of said grass guide remaining in a mounting position abutting a horizontal plane that is above any horizontal plane that is abutted by one or more of the ends of said plurality of blades, said ends of said plurality of blades being in their lowest positions, such that each of said plurality of blades will only cut grass when said blades are in the lower portions of their planes of rotation, reducing each blade's cutting area and therefore reducing the power required to cut said grass, said grass guide in said mounting position also forcing said grass of sufficient height to contact said grass guide prior to encountering said blades and in the cutting path of said plurality of blades to bend such that said uncut grass in said cutting path is positioned in an approximately perpendicular orientation to each blade's plane of rotation and is constrained such that movement of said uncut grass is restricted as it is cut by said plurality of blades.~~

Claim 20 (currently amended): The rotary cutting apparatus of claim 18, wherein said means for adjusting and temporarily fixing said angle within said range comprises

a first arch-like rectangular structure of the chassis spanning the width of the apparatus transversely,

a second arch-like rectangular structure of similar width and radius to that of the chassis, said grass guide extending perpendicularly from the forward-most end of and being continuous with said second arch-like rectangular structure,

wherein said structures are positioned adjacent to each other such that a portion of each of said structures overlaps in with that of the other with their rectangular dimensions remaining in parallel,

wherein the angle of said grass guide can be adjusted within an angular range 1 to 90 degrees from vertical by sliding said second arch-like rectangular structure forward and rearward, and

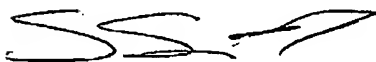
wherein a mechanism is provided to temporarily fix said grass guide at an angle selected from within said range.

~~angle is selected from the group consisting of some or all degrees between 5 and 90 degrees from vertical without tilting the chassis around the wheel axes.~~

2. We also discussed the claiming the blade/shaft/motor/grass guide combination as a unit that adjusts in concert. If this is helpful for the purpose of better describing the invention, we would like to discuss appropriate language.
3. I tried to implement some of the thoughts I got from you during our phone conversation as follows:
  - a. Claim the sliding adjustment feature, describing accurately how the sliding adjustment operates to enable the user to alter the angle of the grass guide and shafts/blades;
  - b. Describe the mower as stationary from the front of the mower to the point where the handle attaches.
  - c. Structurally define the sliding arch where the adjustment takes place. Some preliminary language you suggested was "...an arch (describe the sliding adjustment) that spans the direction of travel transversely..."

Thank you in advance for any advice you may have that will help our case.

Sincerely,



S. Scott Lloyd

P.S. - SORRY FOR THE MULTIPLE FAXES... SHEET  
FEEDER ISN'T WORKING.

